

**ABSTRACT**

5 An attitude system that includes a radiating means which moves predeterminately through three-dimensional space, such that a cyclic Doppler is superimposed upon a transmitted signal; receiving this transmitted signal through a receiving means which moves predeterminately through three-dimensional space, such that a cyclic Doppler is superimposed upon the received signal; analyzing the movement of the receive means in relation to the radiating means by interpreting the received cyclic Doppler; and determining attitude based on the interpreted Doppler. Or alternatively, adjusting the movement of the receive means in three-dimensional space so the superimposed cyclic Doppler is minimized on the received signal and; determining attitude based on the adjustment required to bring the receive means and radiating means into an alignment.

10